CBA

CLINICAL BUSINESS AREA

CHCS II and the Computer-based Patient Record

1999 HIMSS Briefing

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CDR Jean Cohn, Functional Manager
http://cba.ha.osd.mil

24 February 1999

Agenda

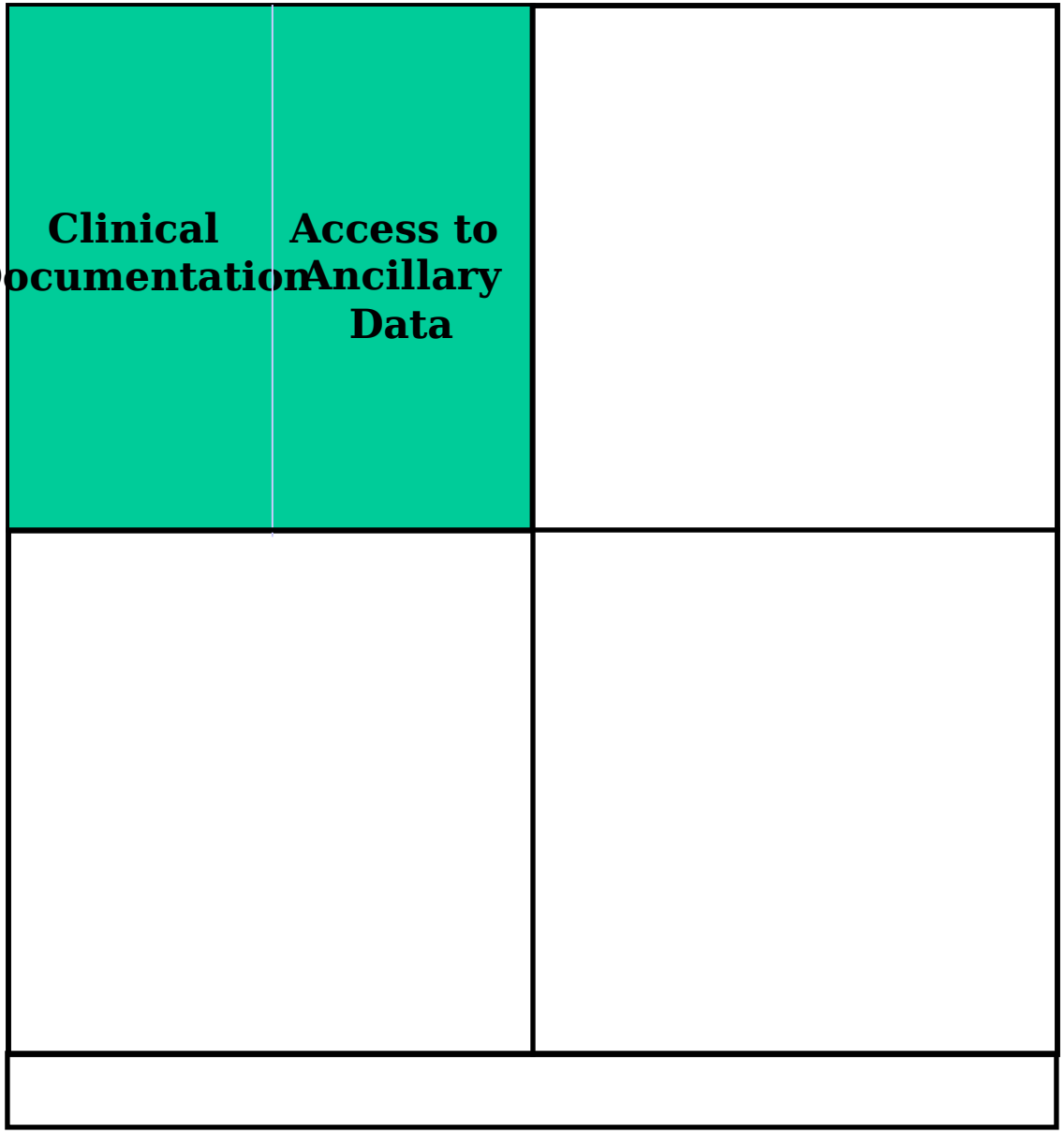
- The Goal….a CPR
- Uniting Efforts for the GCPR
- Building the Foundation
- Application in Theater
- Outcomes and Benefits
- Schedules

Computer-based Patient Record

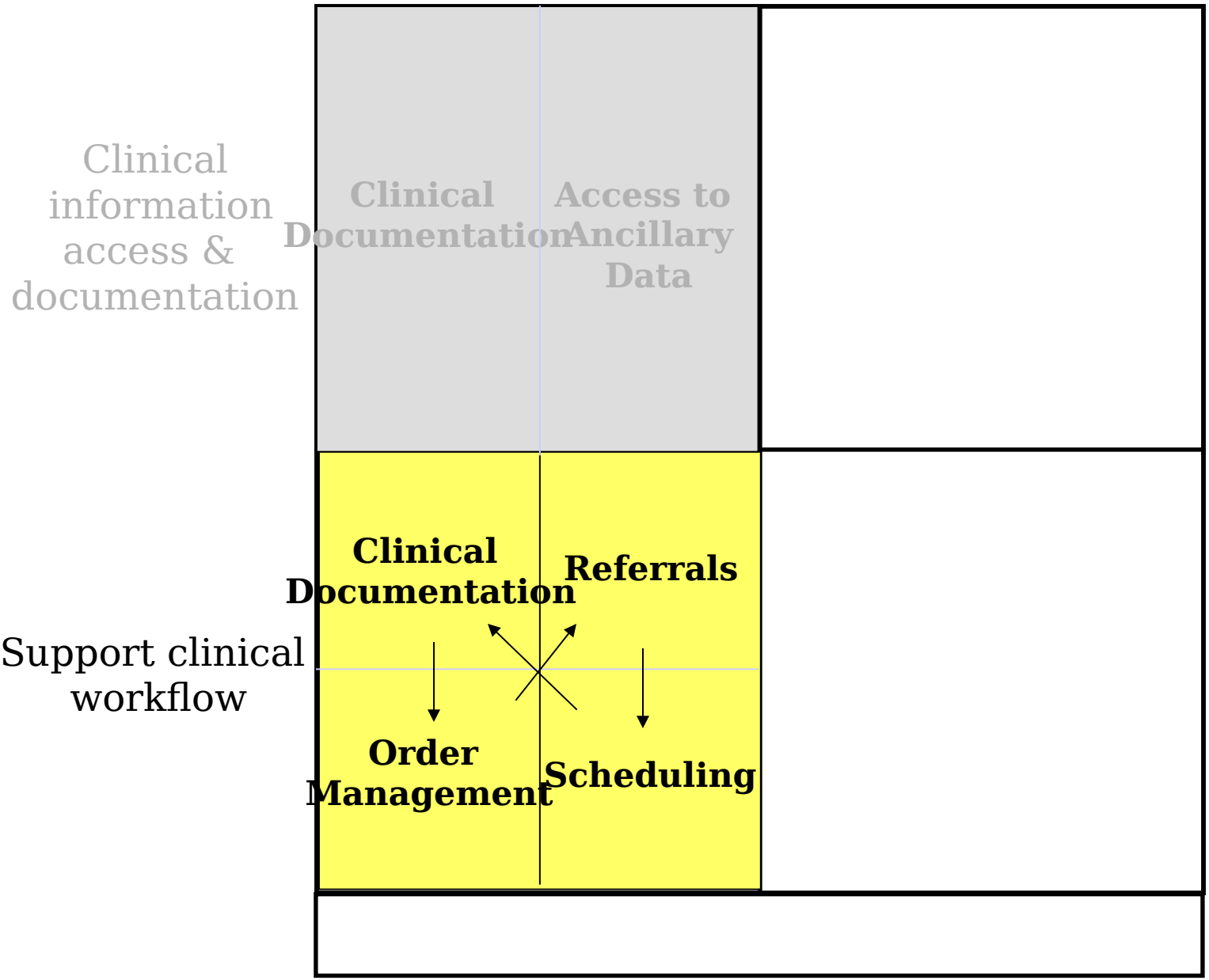
- Electronically maintained information about an individual's lifetime health status and health care.
  - Clinical information access and documentation
  - Support clinical workflow
  - Clinical decision support
  - Security, confidentiality, and privacy of health care information

Business Process

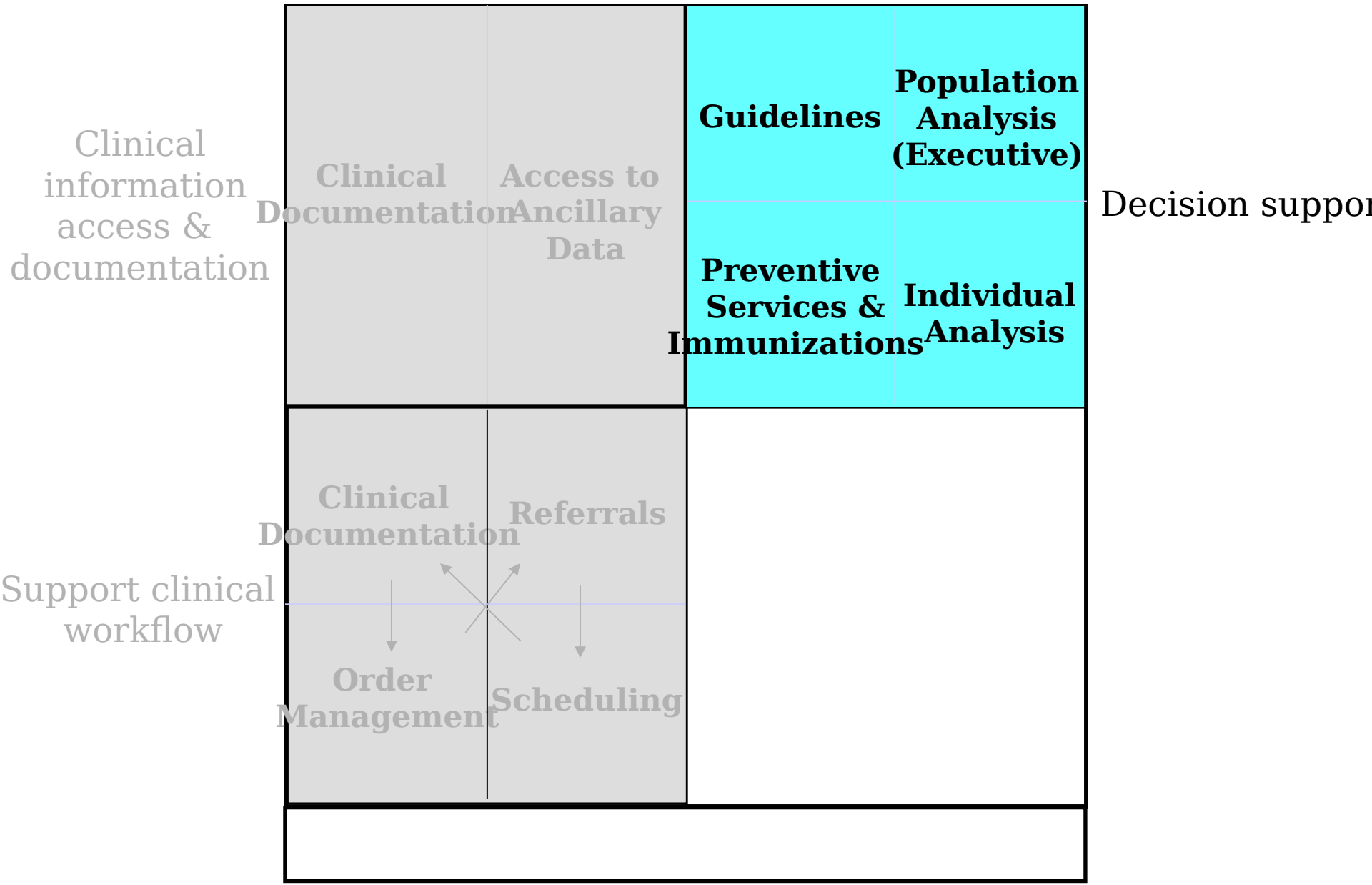
Clinical information access & documentation



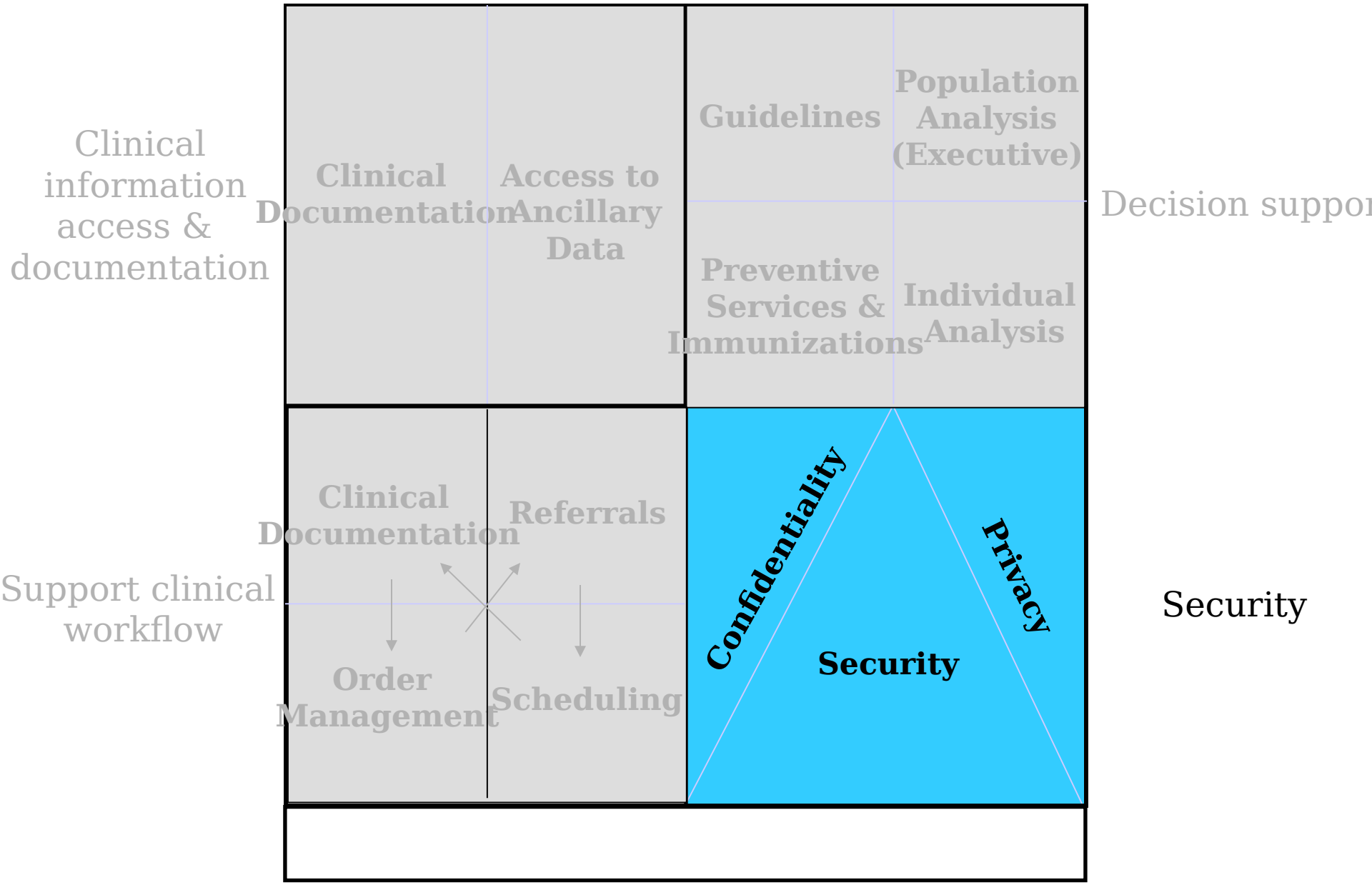
Business Process



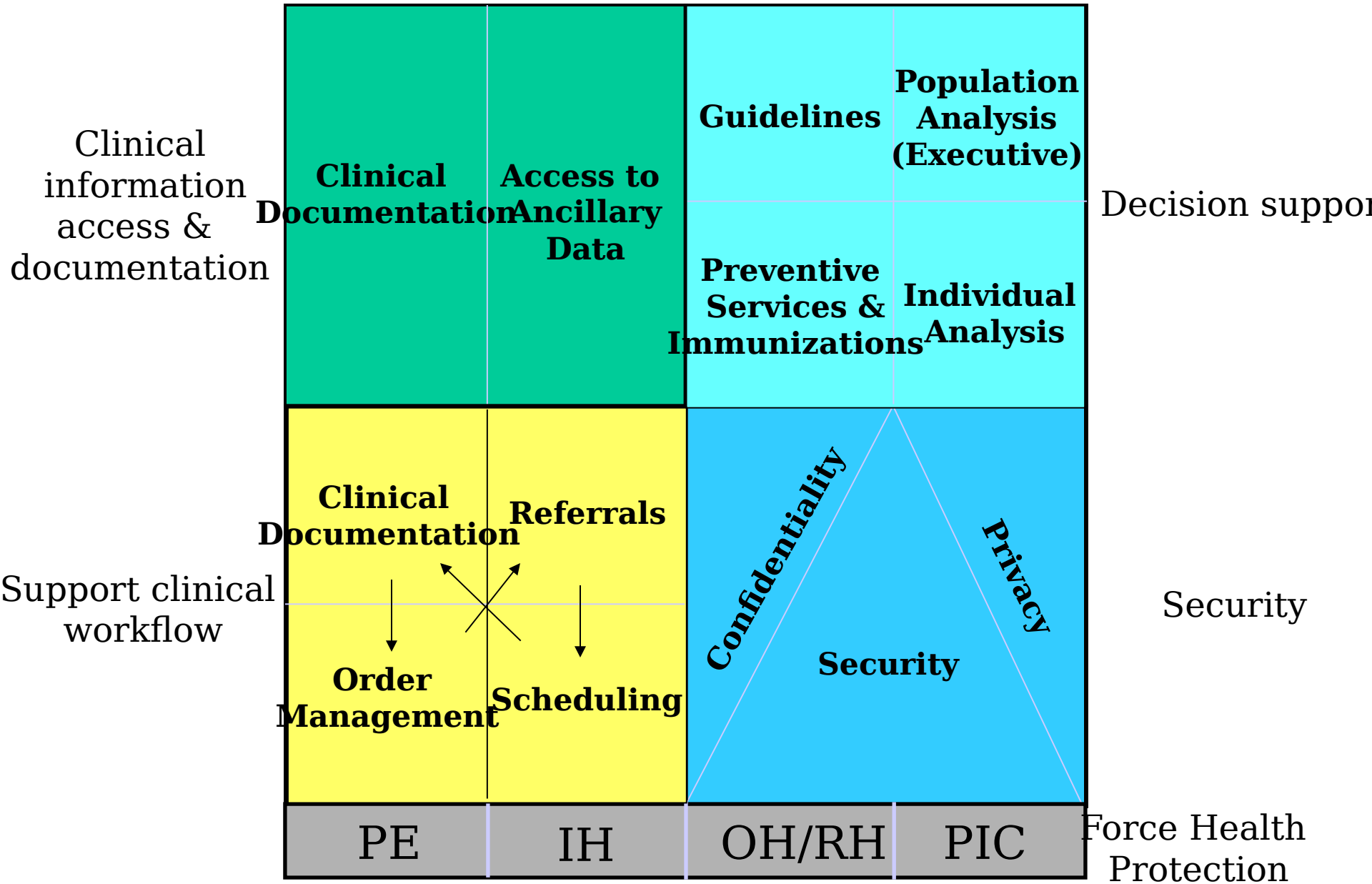
Business Process



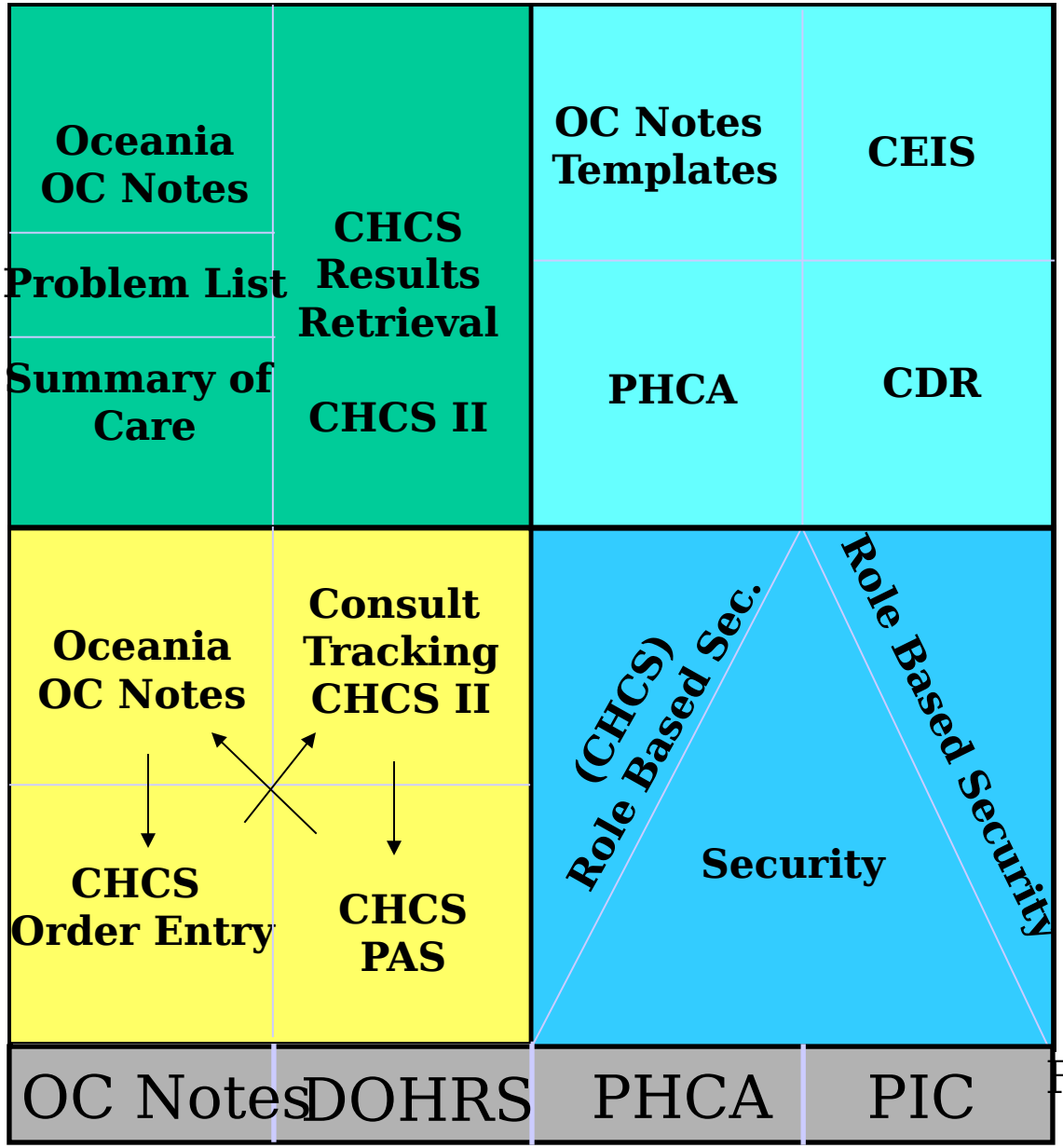
Business Process



Business Process

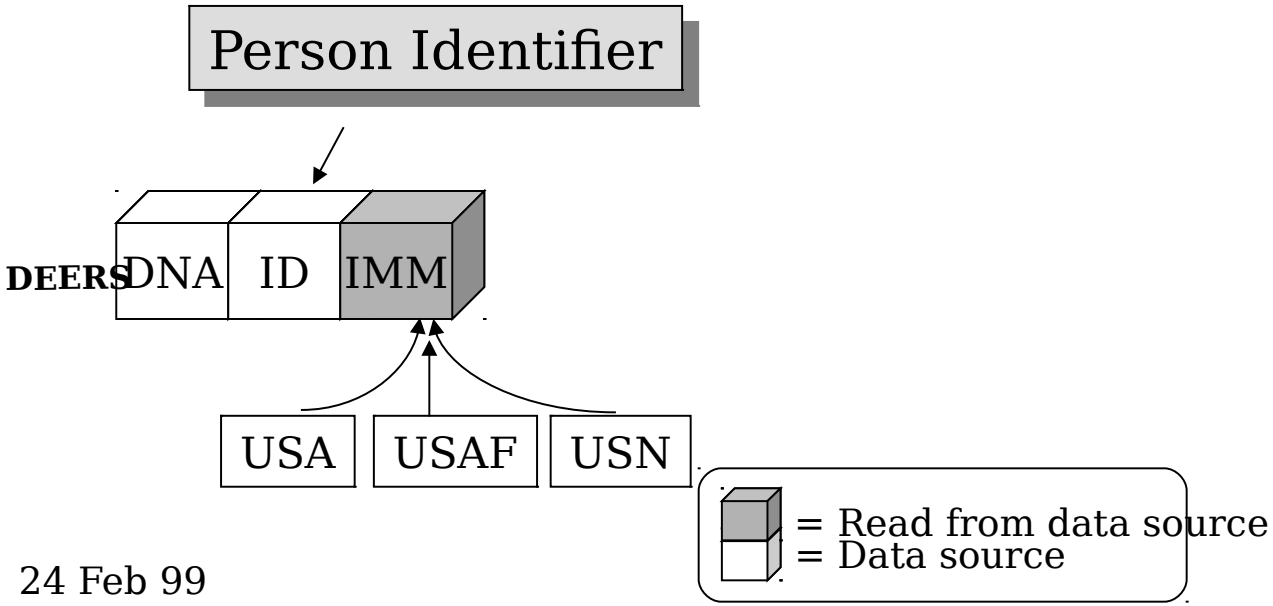


Applications/Functions

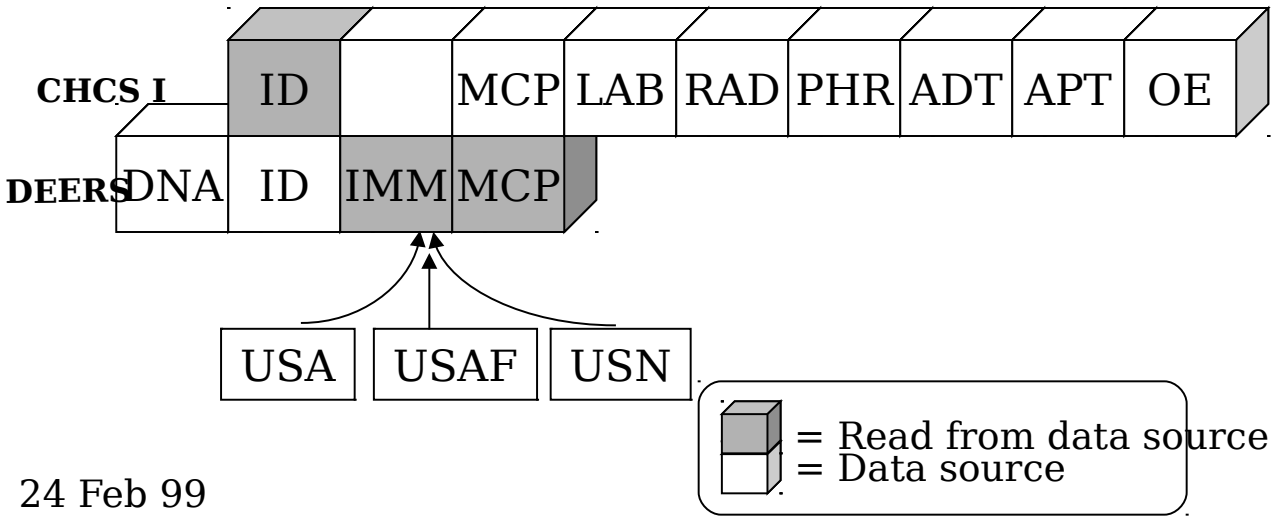


Building a Foundation

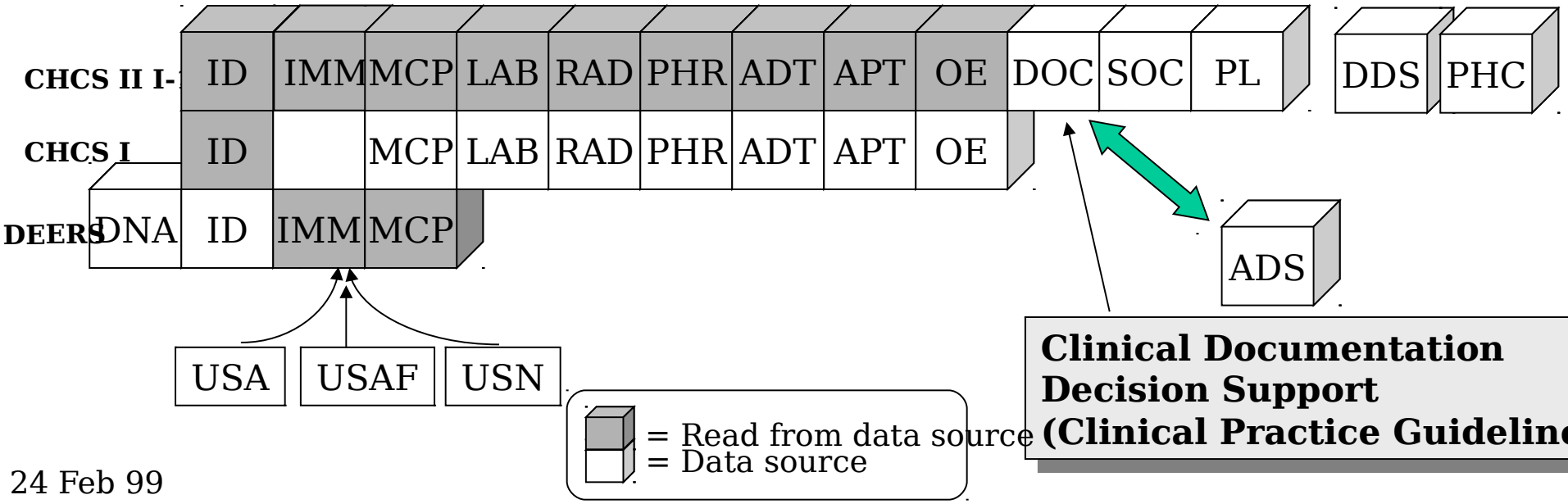
DEERS


Person Identifier
DEERS
DNA
ID
IMM
USA
USAF
USN
= Read from data source
= Data source

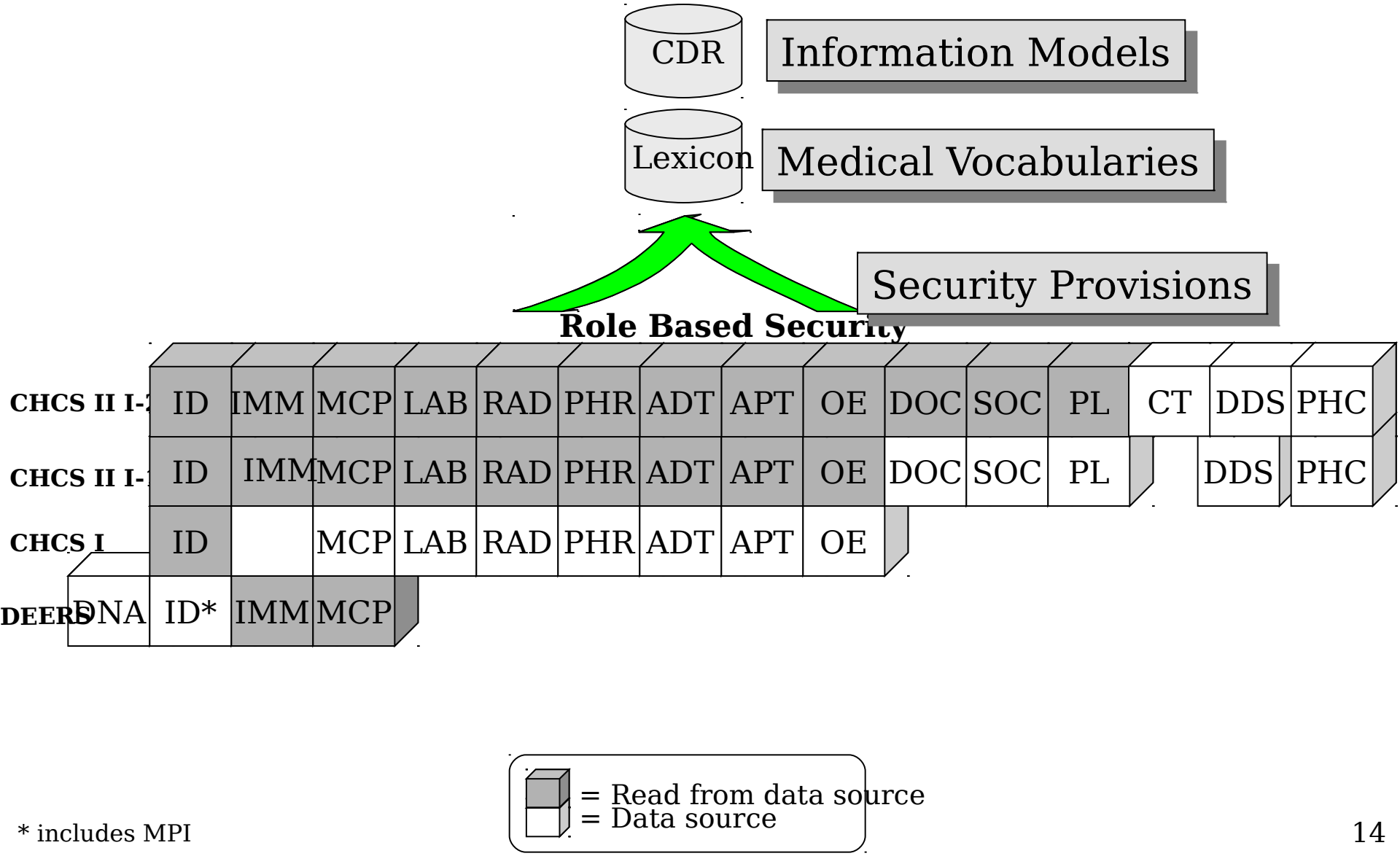
CHCS I


CHCS I
ID
MCP
LAB
RAD
PHR
ADT
APT
OE
DEERS
DNA
ID
IMM
MCP
USA
USAF
USN
= Read from data source
= Data source

CHCS II, Increment 1



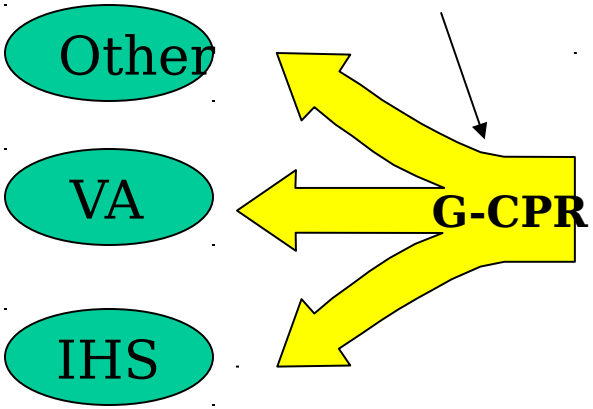
CHCS II, Increment 2

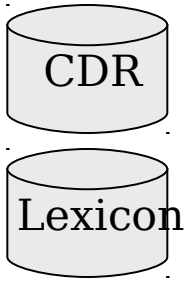


* includes MPI

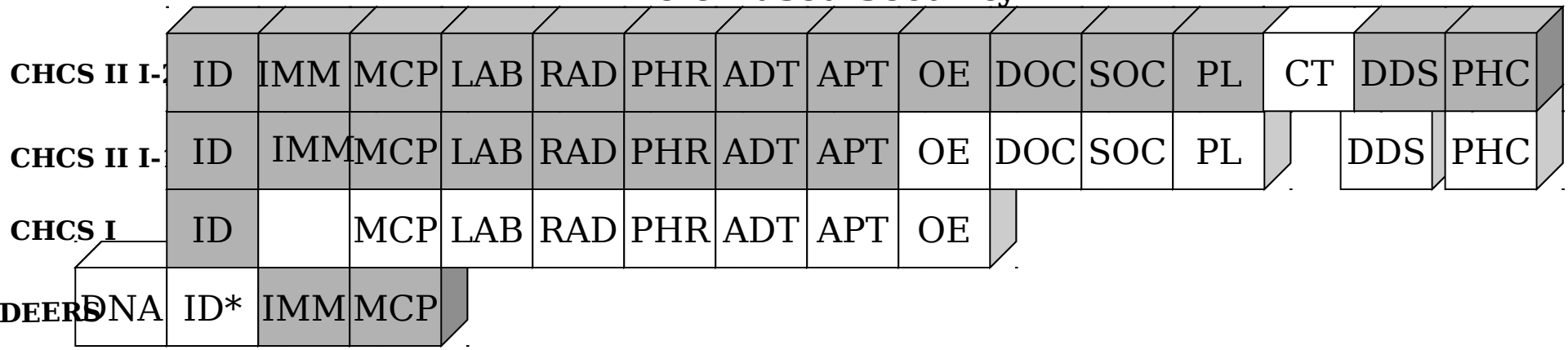
Communication Standards

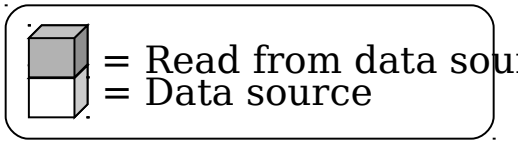
G-CPR





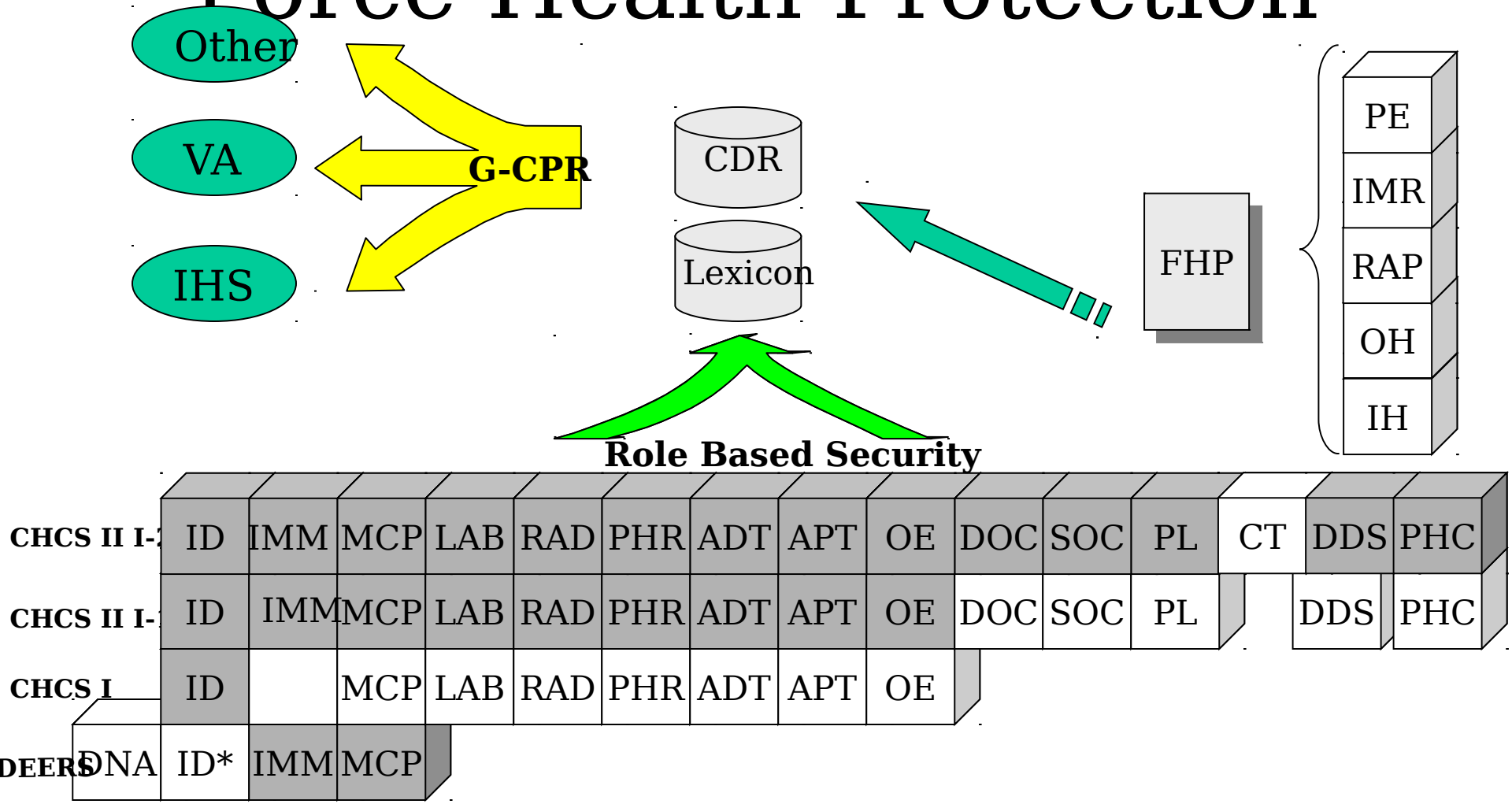
Role Based Security


CHCS II I-2
ID IMM MCP LAB RAD PHR ADT APT OE DOC SOC PL CT DDS PHC
CHCS II I-1
ID IMM MCP LAB RAD PHR ADT APT OE DOC SOC PL DDS PHC
CHCS I
ID MCP LAB RAD PHR ADT APT OE
DEERS
DNA ID* IMM MCP



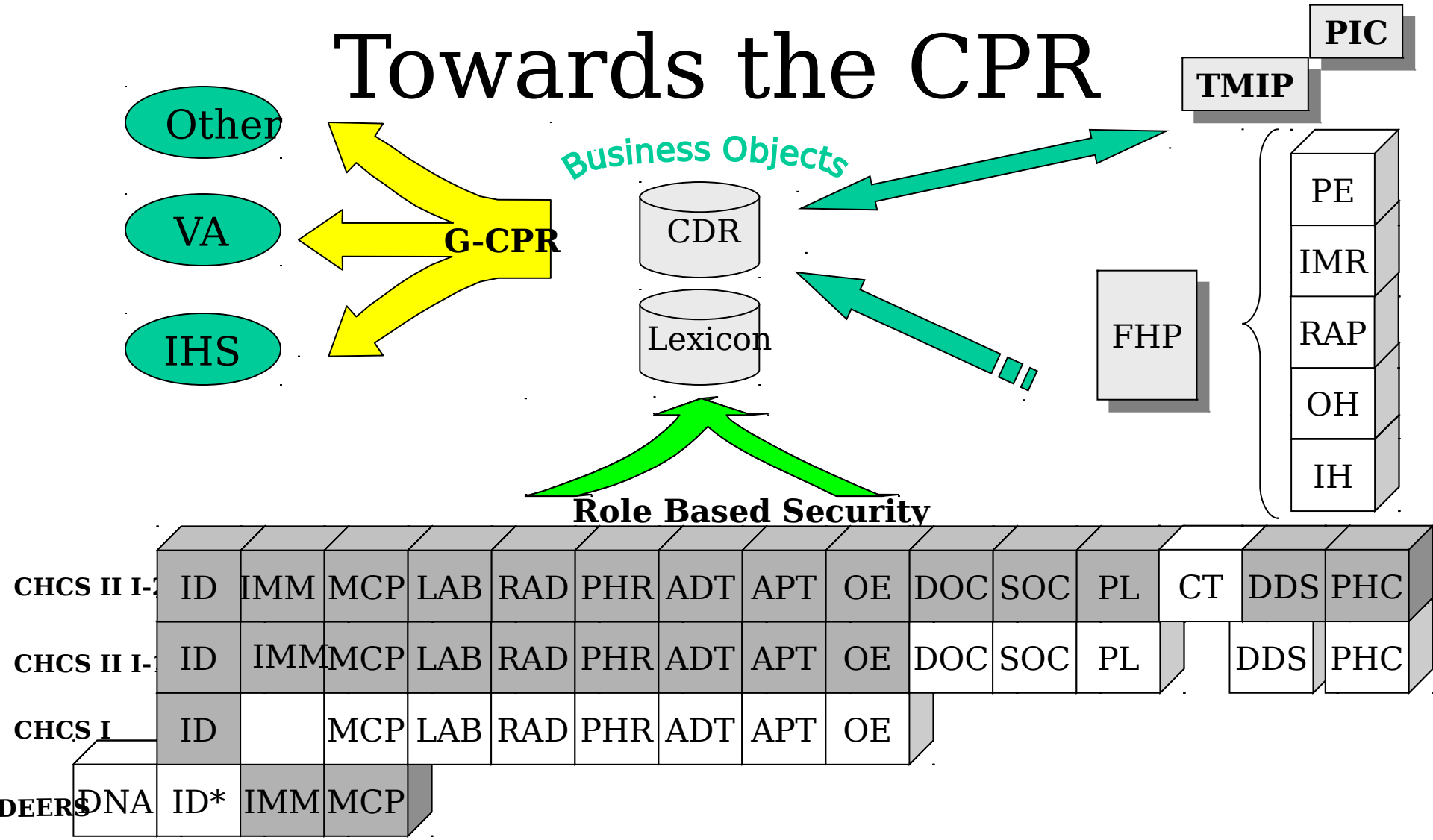
* includes MPI

Force Health Protection



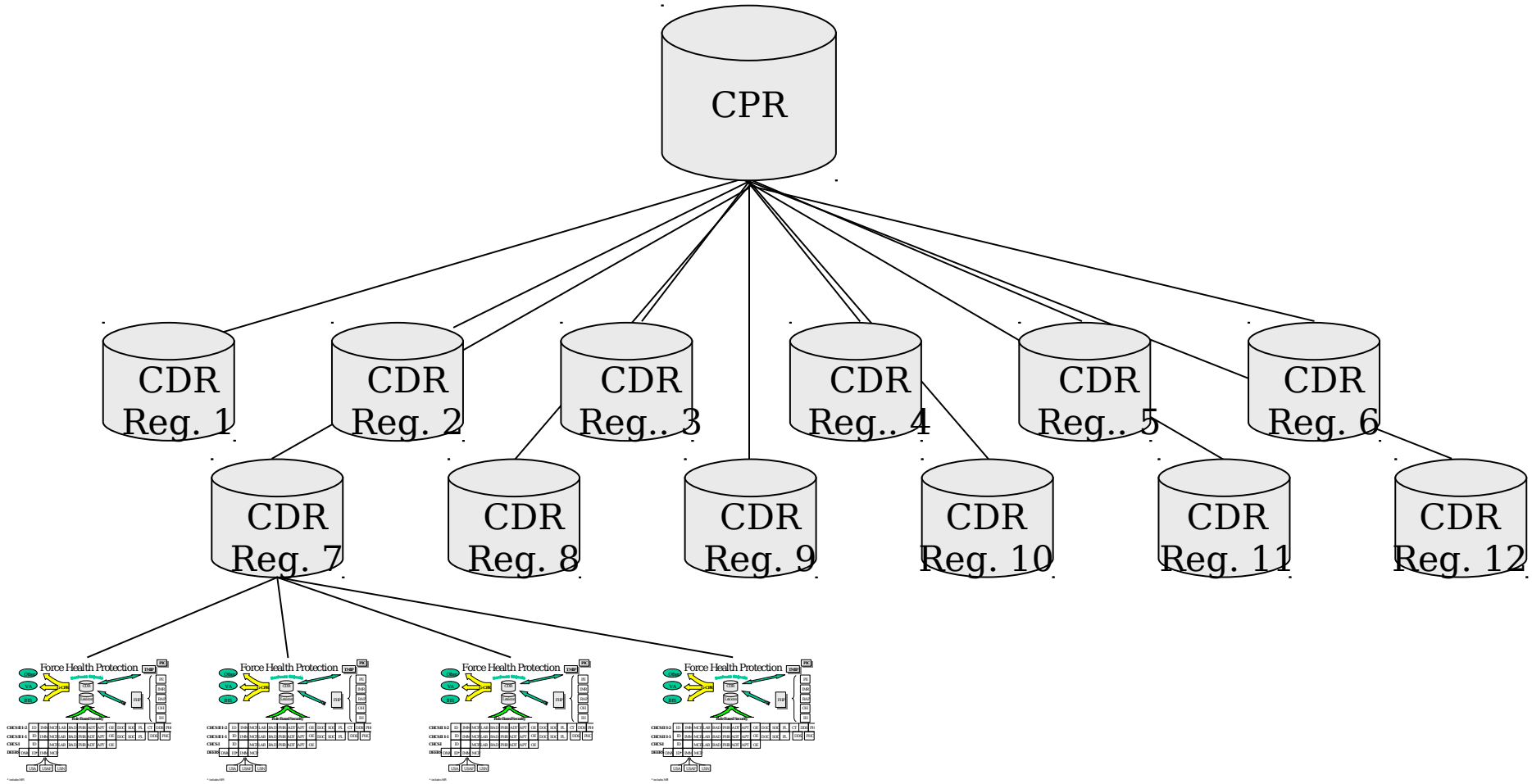
* includes MPI

Towards the CPR



* includes MPI

Population Analysis

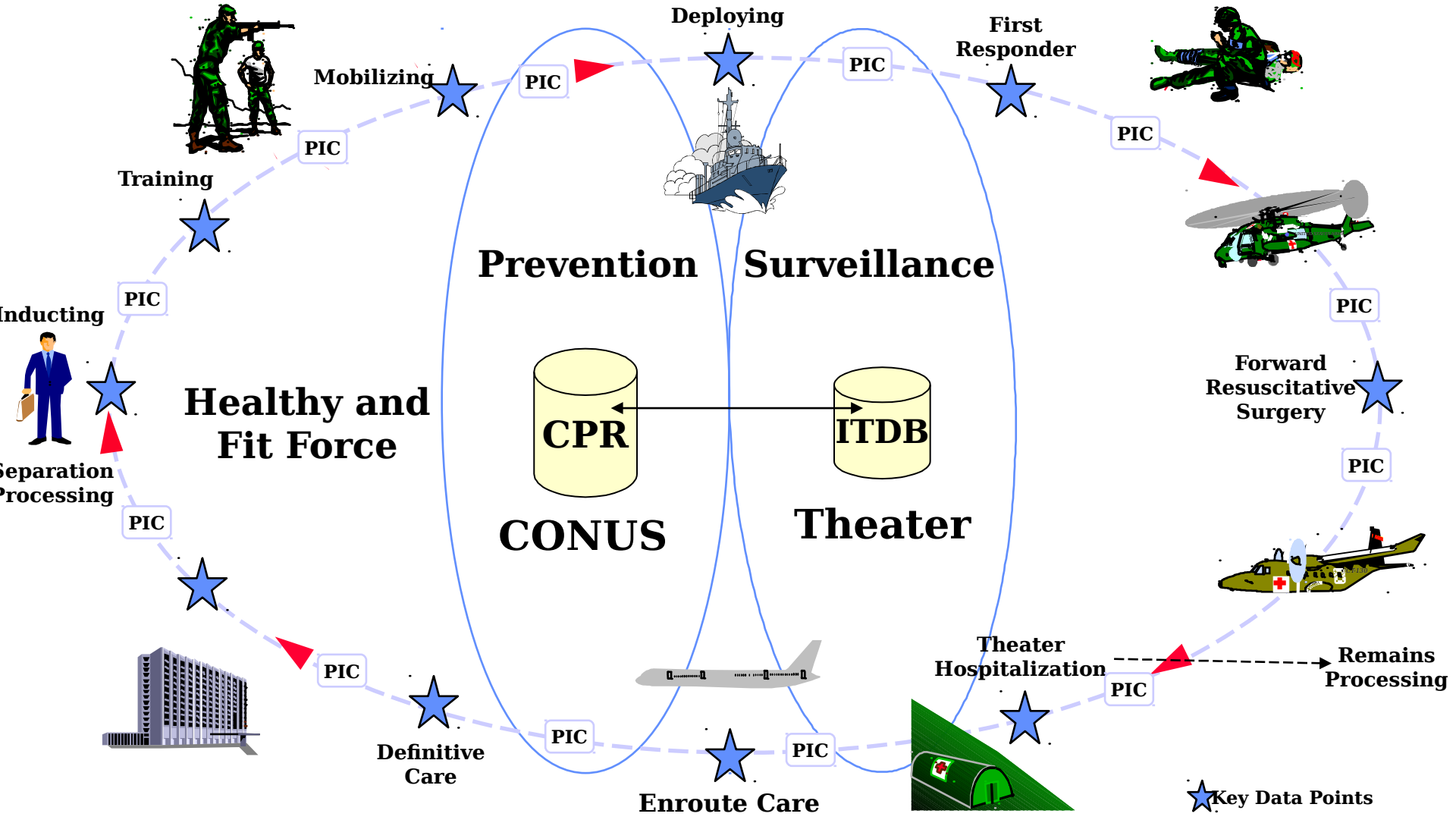


Application in Theater

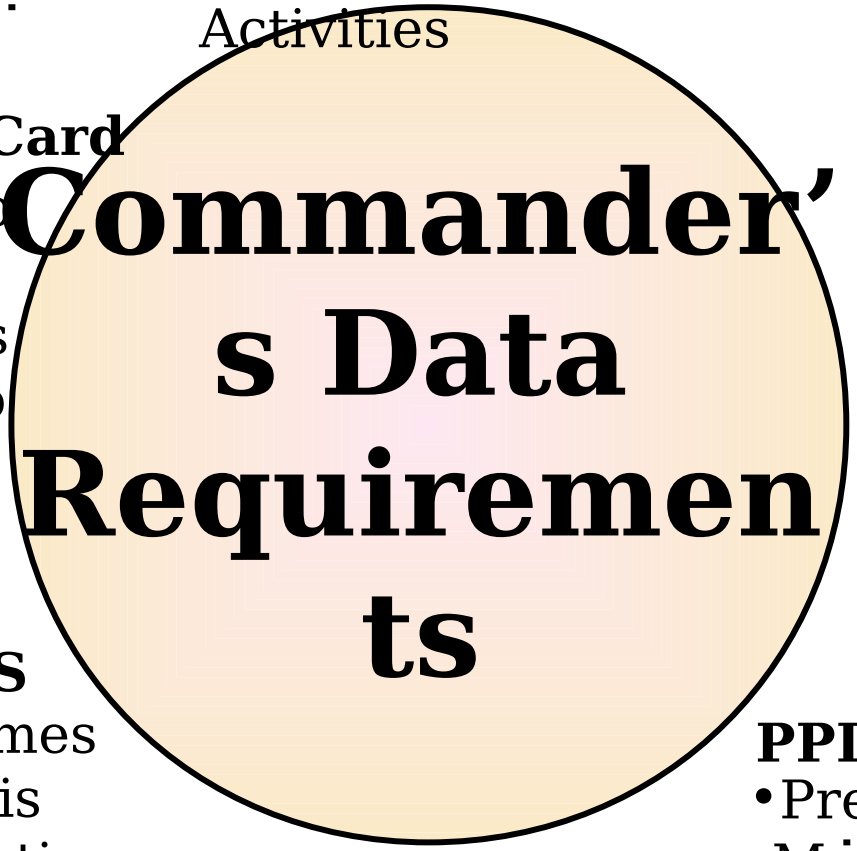
PIC

- The PIC device will provide:
  - A mechanism to move critical medical data within and across echelons of care when communication lines are not available
  - Simple data storage that adheres to industry and MHS standards

Definition: Concept of Operations



Outcomes and Benefits



Managed Care
- ICD-9 Codes
- CPT Codes
- Business Activities

MHS Report Card
- Prevention Measures
- Population Based
- Readiness

JCAHO
- Outcomes Analysis
- Performance Metrics
- Population/disease-based

HEDIS
- Outcomes Analysis
- Prevention Activities
- Population-based

PPIP
- Prevention Measures
- Individual/ Population-based
- Real-time

Short-term Performance Indicators for the CHCS II

Short term measure that will be evaluated after deployment to Hawaii

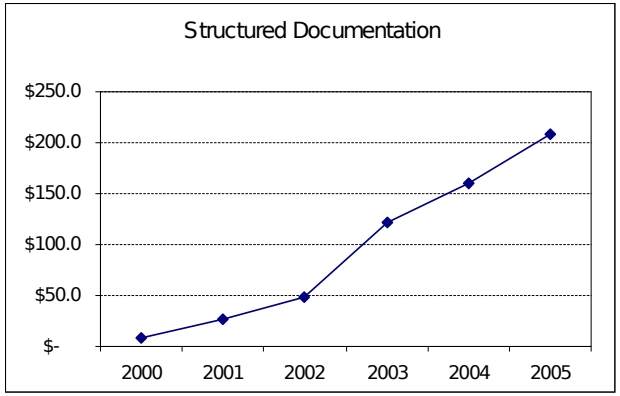
Financial	• Number and Amount of Third Party Insurance Collections
Readiness	• Number of Active Duty in Dental Class 1 & 2 • Change in percentage of Active Duty temporarily disqualified for deployment • Change in number of duty days lost
Preventive and Disease Management	• Number of Hypertension patients with blood pressure under 140/90 • Number of patients with documented serum total cholesterol and High Density Lipoprotein • Number of patients screened for tobacco use • Number of Type I and II diabetic patients who have been tested for HbA1C • Number of female population who with documented mammography and PAP smear

Long Term Performance Indicators for the CHCS II

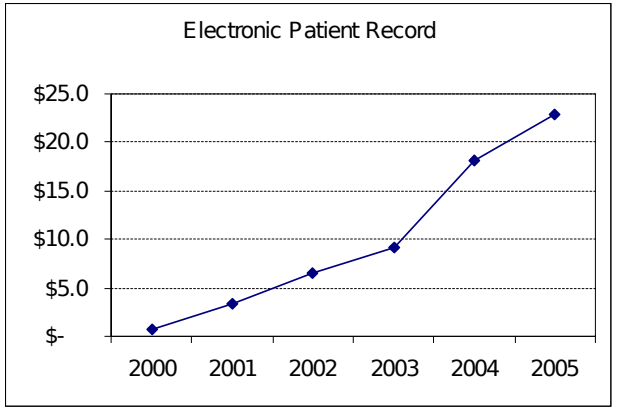
Financial	• Decreased ER Visits • Decreased Inpatient Admissions • Decreased Number of Complex Dental Procedures • Decreased volume of diagnostic tests • Reduced Malpractice Cost • Reduced Adverse Drug Events • Decrease in amount of denied reimbursements
Readiness	• Number of Active Duty in Dental Class 1 & 2 • Change in percentage of Active Duty temporarily disqualified for deployment • Change in number of duty days lost
Preventive and Disease Management	• Increase in number of patients per provider • Increase in number of patients who are up-to-date on preventive services • Increased documented patient education • Increased provided satisfaction • Increased number of visits reported to the SADR

Annual Benefits from CHCS II Increments 1 and 2

(Millions of Constant Dollars)



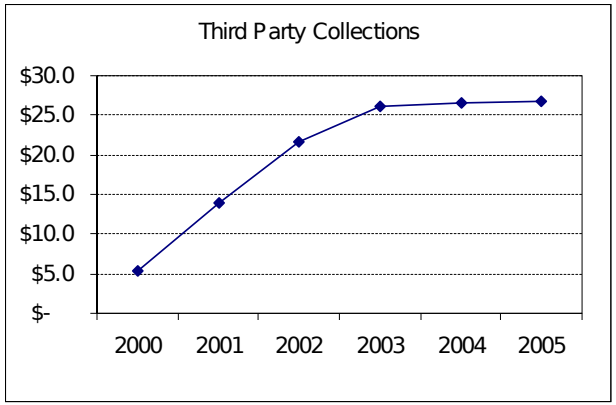
- Reduced Inpatient Admissions
- Reduced Outpatient ER Admissio
- Time Savings -- coding
- Reduced outpatient tests and cos



- Reduced Malpractice Risk
- Reduced Adverse Drug Events

Annual Benefits from CHCS II Increments 1 and 2

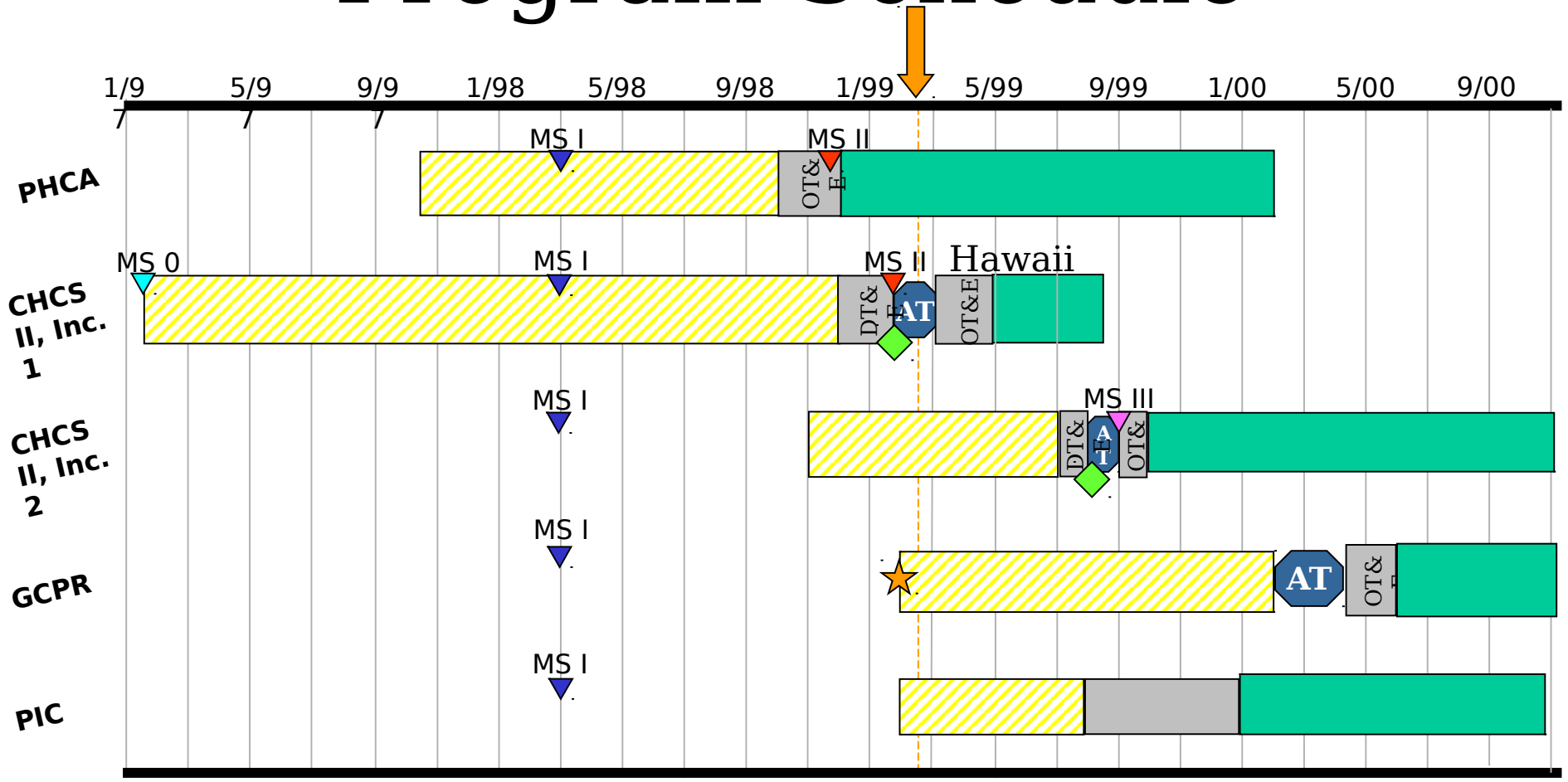
(Millions of Constant Dollars)



- Increased Third Party Collections
- Decreased Denied Reimbursemer

Schedule of Activities

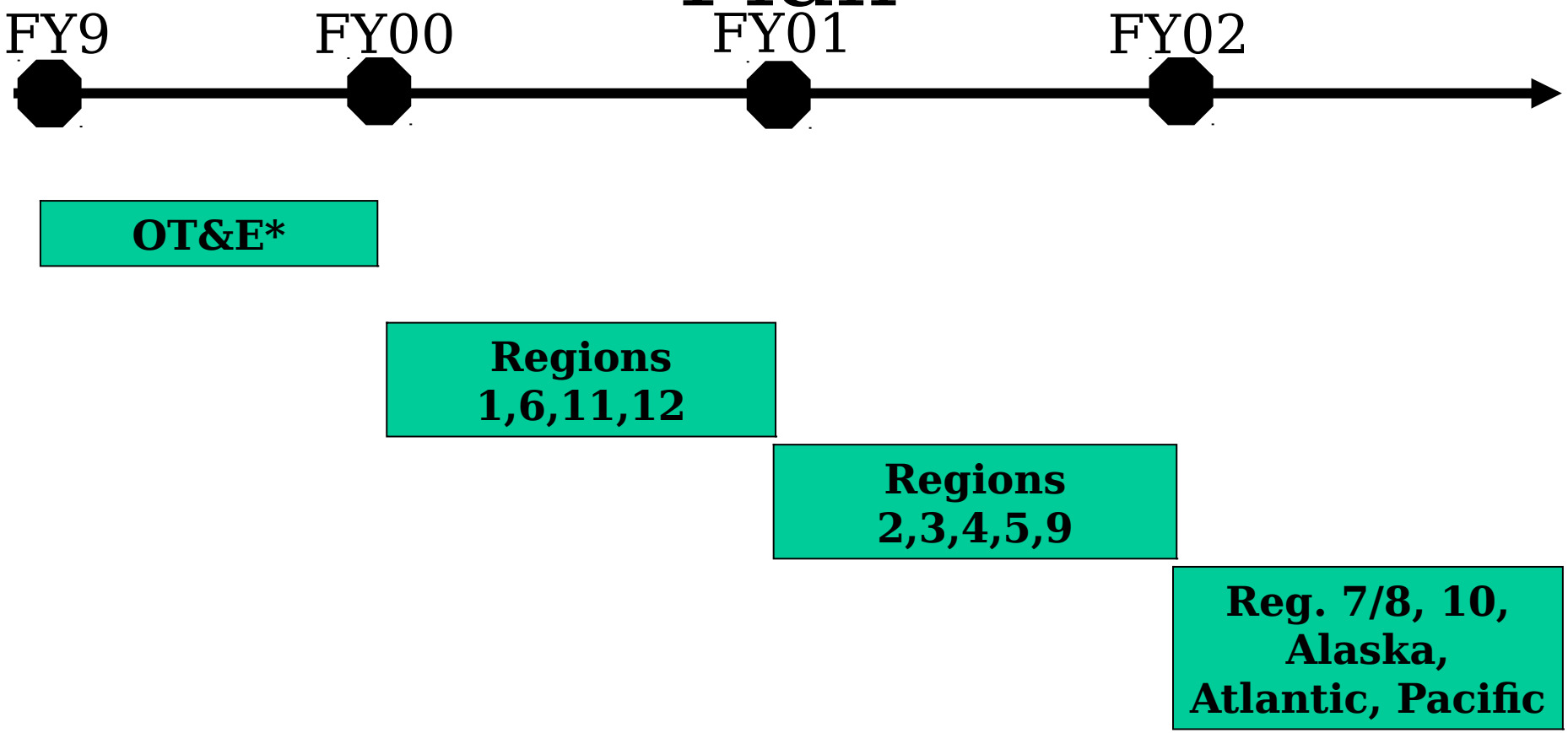
Program Schedule



Schedule Highlights

- CHCS II Inc. 1
  - 29 Jan 99 Go Live in Hawaii
  - May 99 Implementation
- CHCS II Inc. 2
  - Aug 99 Go Live
  - Oct 99 Worldwide Implementation
- GCPR
  - Sep 99 Proof of Concept
  - Dec 99 Pilot Test
- PIC
  - Spring 99 DT&E
  - Summer 99 OT&E

CHCS II Implementation Plan



*Operational Test & Evaluation (OT&E)

Note: Assumes total End User Devices, Comm and Connectivity costs are funded b

Summary

CHCS II…

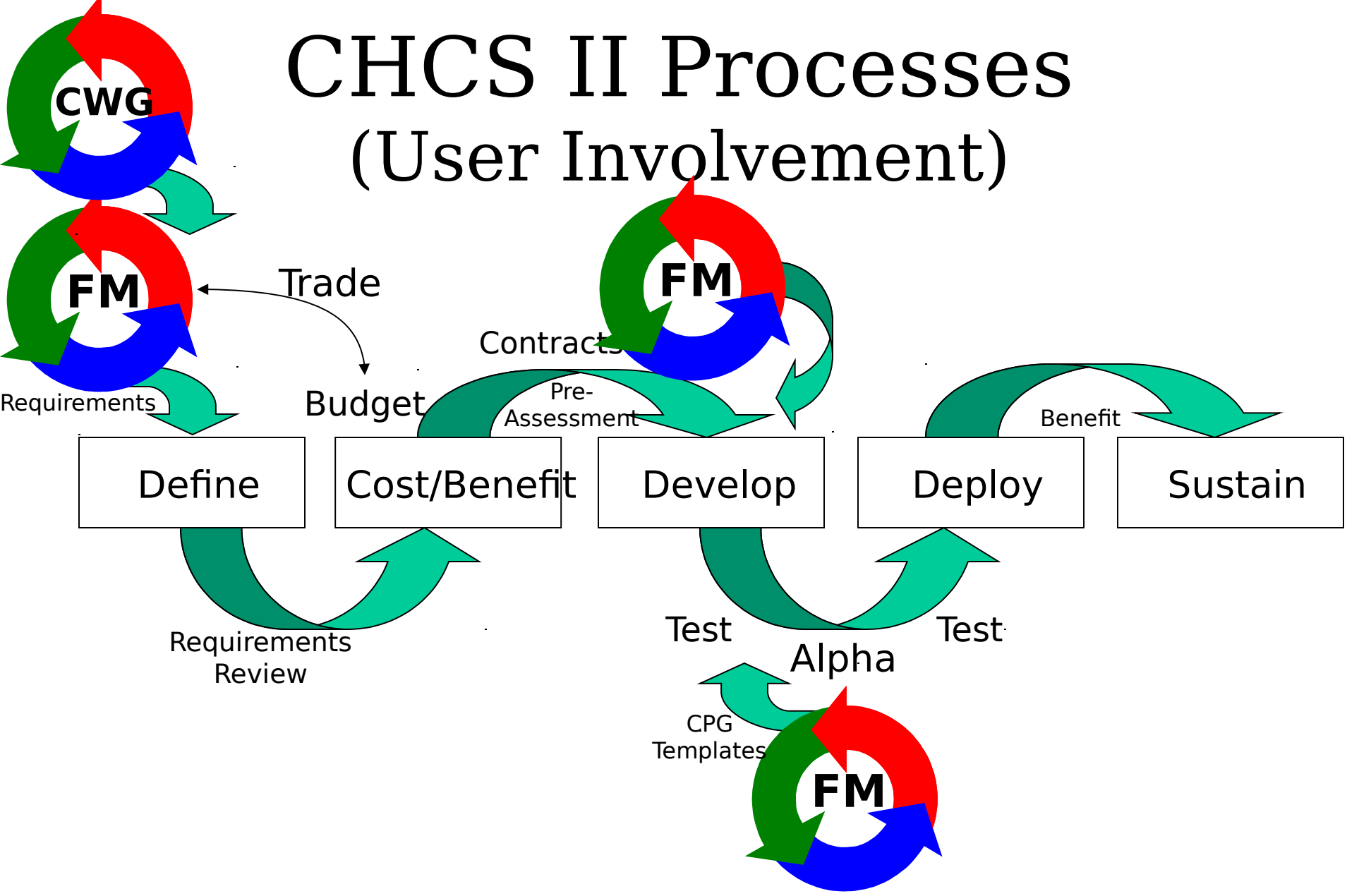
the solution for the enterprise

Back-Up

Acronyms

- ADT- Admissions, discharges and transfers
- APT- Appointment
- BCN- Breast Care Network
- CBC- Clinical Browser Component
- CDR- Clinical data repository
- CHCS- Composite Health Care System
- CPR- Computer based patient record
- CT- Consult Tracking ID- Patient identification
- DDS- Defense Dental System
- DOC- Documentation
- FHP- Force Health Protection
- GCPR- Government Computer based patient record
- IH- Industrial hygiene
- IHS- Indian Health Service
- IMM- Immunizations
- IMR- Individual medical readiness
- Lab- laboratory
- MCP- Managed Care Program
- OE- Order Entry
- OH- Occupational health
- PE- Physical exam
- PHC- Preventive Health Care
- PHR- Pharmacy
- PL- Problem List
- Rad- Radiology
- RAP- Recruit Assessment program
- SOC- Summary of Care
- VA- Veterans Affairs

CHCS II Processes
(User Involvement)



Mission Need | Concept Exploration | Op Req Doc | PD/RR MS I | Analysis TEMP | Cost SAMP | EMD MS II | DTE Report OTE Report | PF/DOS MS III